

REMARKS

Applicants file this preliminary amendment along with a Request for Continued Examination (RCE) application. Prior to examination of the RCE, please enter the amendments and conduct an examination based on the claim set listed above. Applicants submit that claims 1-41 are in condition for allowance, and notice to that effect is respectfully requested.

I. INTERVIEW SUMMARY

Applicants wish to thank the Examiner for his courtesy in participating in a telephone interview on October 30, 2007. In the interview, the applicants and the Examiner discussed applicants' embodiments, along with the main references cited by the Examiner, i.e., U.S. Patent No. 6,118,269 to Davis ("Davis") and U.S. Patent No. 6,157,721 to Shear et al. ("Shear").

First, applicants noted the fact that their energy management device could protect the integrity of data in response to detecting when said tamper prevention seal indicates that unauthorized access has occurred. Applicants also clarified that the protection of the integrity of the data is performed by the energy management device, and not by a socket or another appendage that the meter plugs into. Applicants further noted that the Davis device can only report that the meter was removed, but otherwise can do nothing about what happens to the meter and its secrets subsequent to removal. Independent claims 32 and 41 have been amended to further clarify such distinctions between applicants' device and the devices of Davis and Shear.

During the interview, applicants further noted that claim 1 would be amended to recite the use of an enclosure which surrounds the energy management device. Applicants noted that Davis does not teach an enclosure surrounding the energy management device to protect it from tampering.

In response to the aforementioned comments noted during the phone call, the Examiner seemed confident that such proposed amendments to independent claims 1, 32 and 41 were potentially patentable, pending further analysis. While an agreement was not reached, the Examiner indicated that he understood the novel features the applicants described, and he advised the applicants to consider further amending or tweaking the language of the independent claims to reflect such potentially patentable differences.

Accordingly, the amendments to claims 1, 32 and 41 listed above have been drafted in an attempt to capture the positive feedback provided from the Examiner during the interview.

II. REJECTIONS UNDER 35 U.S.C. § 102(b)

A. Rejection to Independent Claim 1

Independent claim 1 is rejected under 35 U.S.C. § 102(b) as being anticipated by Davis. Applicants submit that claim 1 is patentable over Davis because Davis fails to teach each and every limitation as required by this claim.

Solely to expedite prosecution, applicants have amended claim 1 to recite, *inter alia*, “an enclosure which surrounds said energy management device and protects said energy management device from tampering,” and “a tamper prevention seal coupled with said enclosure, which detects unauthorized access to said enclosure.” The claim further recites “a seal tamper detection unit coupled with said processor and said tamper prevention seal and operative to detect when said tamper prevention seal indicates that unauthorized access has occurred.”

Support for the amendments to independent claim 1 may be found throughout applicants’ specification. For example, and without limitation, support may be found at least in Figure 4 and paragraph 0084 of applicants’ specification. The use of such an enclosure may be beneficial by providing another layer of security to protect an energy management device from access, tampering or accidental damage. (see, e.g., applicants’ specification at paragraph 0084).

By contrast, Davis neither teaches nor suggests an enclosure meeting the limitations of amended independent claim 1, and more particularly, Davis does not teach or suggest “an enclosure which surrounds said energy management device and protects said energy management device from tampering,” as required by amended claim 1. Davis teaches “[a]n electric meter tamper detection system for sensing removal of an electric meter from a corresponding meter socket...” (Davis Abstract). The only enclosure described by Davis is “an enclosure or electronics bay 202,” which is used to surround a utility gateway 100. (see Davis at col. 11, lines 31-37; FIGS. 2-3). There is no description of such an enclosure surrounding the power meter, which is “not shown” by Davis. (see Davis at col. 11, lines 35-37).

In short, since Davis does not teach or suggest “an enclosure which surrounds said energy management device and protects said energy management device from tampering,” Davis neither

teaches nor suggests each and every element of independent claim 1. Therefore, applicants respectfully submit that claim 1 is in condition for allowance.

B. Rejection to Independent Claims 32 and 41

Independent claims 32 and 41 are rejected under 35 U.S.C. § 102(b) as being anticipated by Shear. Applicants submit that claims 32 and 41 are patentable over Shear because Shear fails to teach all the limitations required by the claims.

Solely to expedite prosecution, claim 32 has been amended to recite the step of “protecting said integrity of said data by said energy management device in response to said detecting, said energy management device acting to protect said data as generated, stored or transmitted thereby.” Similarly, claim 41 has been amended to recite a “means for taking action to protect said integrity of said data by said energy management device in response to said means for detecting, said energy management device acting to protect said data as generated, stored or transmitted thereby.”

Support for the amendments to independent claims 32 and 41 may be found throughout applicants’ specification. For example, and without limitation, support may be found at least in paragraphs 0085-0089, 0098 and 0100 and FIG. 5 of applicants’ specification.

The Shear patent states that “[t]he present invention provides improved techniques for protecting secure computation and/or execution spaces ... from unauthorized ... load modules or other ‘executables’ or associated data.” (see Shear at col. 4, lines 51-56). Load modules 54 are produced by authorized provider 52 and distributed for use by different users. Authorized provider 52 submits load modules 54 to verifying authority 100. Verifying authority 100 analyzes and tests the load modules 54. If a load module 54 passes the test, verifying authority 100 may affix a digital seal of approval to the load module. Protected processing environments 108 can use digital seal of approval 106 to distinguish between authorized and unauthorized load modules 54 (see, e.g., Shear at col. 8, lines 17-19; col. 9, lines 3-10, 43-55).

Shear does not teach or suggest a device wherein “protecting said integrity of said data by said energy management device in response to said detecting, said energy management device acting to protect said data as generated, stored or transmitted thereby.” In sharp contrast, Shear teaches that a verifying authority 100, i.e., a third party, is used to protect the integrity of data or load modules. Shear states that “[i]f a load module 54 passes the tests verifying authority 100

subjects it to, a verifying authority may affix a digital "seal of approval" (see 104) to the load module." (see Shear at col. 9, lines 42 – col. 10, line 3). Therefore, Shear clearly does not teach or suggest that the energy management device, or a combination of a verifying authority and the energy management device, protects the integrity of said data; rather, it is an independent verifying authority. For at least this reason, amended independent claims 32 and 41 are allowable over Shear.

The Davis reference, whether used alone or in combination with Shear, neither anticipates nor renders obvious independent claims 32 and 41. As noted above, Davis is directed to "[a]n electric meter tamper detection system for sensing removal of an electric meter from a corresponding meter socket...." (see Davis Abstract). Davis further states that the microprocessor of the utility gateway "initiates communication with a headend or other monitoring station to indicate that the gateway has been tampered with (i.e., uncoupled from the power meter)." (see, e.g., Davis at col. 12, lines 18-21; see also col. 3, lines 57-60; col. 14, lines 35-36). In short, the utility gateway 100 within the enclosure 202 merely reports when the power meter has been tampered with or stolen. The power meter of Davis is not shown and does nothing to protect data after a tampering event. There is no suggestion that Davis' meter can take protective action in response to the detection of tampering. In fact, Davis' device teaches away from applicants' claims because it appears that after its removal from the socket, the meter becomes unplugged and would be incapable of reporting an event or taking any protective action (of which none is described).

In sharp contrast, applicants' device takes one or more protective actions in response to detecting unauthorized access, and the actions are taken by the energy management device to protect data as generated, stored or transmitted thereby. Such actions may include those listed in Figure 5, or otherwise shown or described throughout applicants' specification. Since the energy management device of applicants' embodiments can take protective action after tampering to protect its information, secrets, and the like, such device is a significant improvement over previously known devices.

Since neither Shear nor Davis, whether alone or in combination, teach nor suggest "protecting said integrity of said data by said energy management device in response to said detecting, said energy management device acting to protect said data as generated, stored or transmitted thereby," amended independent claims 32 and 41 are in condition for allowance.

III. REJECTIONS TO DEPENDENT CLAIMS 2-31 AND 33-40

As explained above, since Davis does not disclose or teach the invention of independent claim 1, it cannot anticipate or render obvious the claims that depend from claim 1 for at least the reasons set forth above. Accordingly, dependent claims 2-31 are in condition for allowance. Similarly, since Shear does not disclose or teach the invention of independent claims 32 and 41, it cannot anticipate or render obvious the claims that depend from claim 32 for at least the reasons set forth above. Accordingly, dependent claims 33-40 also are in condition for allowance.

CONCLUSION

Each of the rejections in the Final Office Action dated October 10, 2007 has been addressed and no new matter has been added. Applicants submit that all of the pending claims 1-41 are in condition for allowance and notice to this effect is respectfully requested. The Examiner is invited to contact the undersigned attorney if such communication would expedite the prosecution of this application.

Respectfully submitted,



Douglas A. Oguss
Registration No. 48,469
Attorney for Applicants

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BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, ILLINOIS 60610
(312) 321-4200